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GenCore version 4.5
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OM protein - protein search, using sw model

Run on: January 30, 2002, 11:50:30; Search time 27.34 Seconds (without alignments)
72.441 Million cell updates/sec Perfect score: 183
Sequence: 183
Sequence: 183
Secoring table: BLOSUM62
Gapop 10.0, Gapext 0.5
Searched: 219241 seqs, 76174552 residues
Total number of hits satisfying chosen parameters: 219241
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Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries Minimum DB seq length: 0
Maximum DB seq length: 2000000000

PIR_68:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Database :

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARI

ZĈ	Score	ery tch	Length I	DB	ID	Description
1	77		. !	2	E48232	teine-rich
2	71.5			N	34	NADE OVICE TOTAL
ω	70	38.3	172	N	50	hypothetical prote
4	68.5			N	T07176	extensin homolog -
ı Uı	68			N	T51039	related to extensi
σ	68			Ν	B48232	ב-דוכה לאוכה
7	83			Ν	A48232	Cysteine-rich exte
00	c)			N	T15446	
	66.5			Ν	D48232	7
10	00			N	A36454	trypsin-modulating
1 L	0	•	1171	N	T17454	diaphanous-related
1 1 2	ر م	ນ (ປ ກ (ປ) K	T18540	mofA protein precu
14	64			S I	821961	
15	64	•	650	2	T04487	hypothetical prote
16	64	٠		N	T46476	hypothetical prote
17	64	•		Ν	A86335	<u> </u>
1 6	64	•		N	E85509	-
19	63	•		N	D41132	ated
20	63	•		N	A32993	<u> </u>
21	62	33.9	137	N	T22308	֓֟֓֓֟֓֓֓֟֓֓֓֟֓֓֓֓֓֟֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓
22	62	•		ب ـــا	JC1222	, '
23	62	•		Ν	T08776	
24	62	•		N	B84668	ethylene-insensiti
25	62	•		Ν	S45495	isp4 protein - fis
26	62	•		Ν	T13159	55kDa-accoria
27	-	•		N	S19990	TOUCH ACTION
28		•		2	A56154	hetrato
29	61	•		2	A30996	1

4 D	- #	A :	4	4.2	. #	1	40	39		ຜ	3/	0 (20	35		<u>د</u>	i de la companya de l	100	رد	T.	30
61	2 2	<u>, , , , , , , , , , , , , , , , , , , </u>	2,	5 L	10	7 1	<u>.</u>	δĹ	, F	7	61	1 F	7	61	2	ņ	61	0		61	61
33.3) (s	ى ر	بد در		33.3) i	بد ند	ن. نا . نا		L L			ມ	ω	00.0	ن د د	ω ω .ω	33.5	,	33. 3	33.3
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T31611	95767.1	11010	T10157	S01966	T21934	1000	1265167	T26635	165T 5U	7 1 1 0 7	T19083	553094	2000	S03066	S12155	2	ASLJX3	ASLJST		ASLICX	ASLJX2
hypothetical prote	probable metal bin	propapte metal pin		3	hypothetical prote	Tomor discoprocern nomor		hypothetical prote	36K antigen pra -		hypothetical prote	vpx protein - huma	U 11 11 11 11 11 11 11 11 11 11 11 11 11	gene X protein - h	vpx protein – huma	THE PROCESSION		vpu protein - simi	יישות וודפסטבעו הישומ		vpu protein - huma

ALIGNMENTS

RESULT 2 S23449 NADH oxidase (H202-forming) (EC 1.6) - Thermus aquaticus C;Species: Thermus aquaticus C;Species: Thermus aquaticus C;Date: 22-Jan-1993 #sequence_revision 22-Jan-1993 #text_change 23-Mar-1993 C;Accession: S23449; S24556 Ext. J. Biochem. 205, 875-879, 1992 A;Title: Molecular cloning and nucleotide sequence of the gene encoding a H(2)0(2)-fo A;Reference number: S23449; MUID:92249331 A;Reference number: S23449; MUID:92249331 A;Residues: 1-248 <par>A;Coession: S2456 A;Accession: S2456 A;A</par>	Query Match 42.1%; Score 77; DB 2; Length 161; Best Local Similarity 43.8%; Pred. No. 0.075; Matches 14; Conservative 2; Mismatches 2; Indels 14; Gaps 3; Qy 3 WPWWPWKWPLIGGGYDPAPPPPP 26	; fertilization; (icted <sig> ke protein 5 #stat</sig>	R;Wu, H.; Zou, J.; May, B.; Gu, Q.; Cheung, A.Y. Proc. Natl. Acad. Sci. U.S.A. 90, 6829-6833, 1993 A;Title: A tobacco gene family for flower cell wall proteins with a proline-rich doma A;Reference number: A48232; MUID:93342083 A;Accession: B48232 A;Status: preliminary A;Molecule type: DNA A;Residues: 1-161 < WUA> A;Cross-references: GB:L13443; NID:9310930; PIDN:AAA34063.1; PID:9310931	E48232 Cysteine-rich extensin-like protein 5 precursor - common tobacco C;Species: Nicotiana tabacum (common tobacco) C;Date: 26-May-1994 #sequence_revision 26-May-1994 #text_change 17-Nov-2000 C;Accession: E48332
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hypothetical protein ZC168.5 - Caenorhabditis elegans
C;Species: Caenorhabditis elegans
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 15-Oct-1999
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                                                                                                                                                                                                                                                                                          A;Cross-references: EMBL:AJ003220; NID:e1251331; PIDN:CAA06000.1; PID:e1251332 A;Experimental source: cv. Record; swelling stolon C;Superfamily: glutelin
                                                                                                                                                                                                                                                                                                                                                                                                             submitted to the EMBL Data Library, December 1997 A; Reference number: Z15977 A; Accession: T07176
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A; Accession: T27505
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           C;Species: Solanum tuberosum (potato)
C;Date: 30-Apr-1999 #sequence_revision 30-Apr-1999 #text_change 17-Nov-2000
C;Accession: T07176
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A; Introns: 112/3
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                                      RESULT
T51039
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                                                                                                                                                                                                                                                                                                                                                      A; Molecule type: mRNA
A; Residues: 1-221 <MAC>
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related to extensin precursor [imported] - Neurospora crassa \mathbf{N}; \mathtt{Alternate} names: protein \mathtt{B15120.90}
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                                                                                                                      24
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                                                                                                                                                         3 WPW-----WPWKWPLIGGGYD-----PAPPPPPP 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                PPCGGGYEAPPPPPPP 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     PLIGGGYDPAPPPPPP 26
                                                                                                                      WPWEIPCYLPWPFPFP---RPYPCPPPKPRPSPPPPPP 58
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Similarity 44.1%;
15; Conservative
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36.8%;
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Pred. No. 0.
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    Mismatches

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Pred. No. 0.46;
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R;Wu, H.; Zou, J.; May, B.; Gu, Q.; Cheung, A.Y.
Proc. Natl. Acad. Sci. U.S.A. 90, 6829-6833, 1993
A;Title: A tobacco gene family for flower cell wall proteins with a proline-rich doma A;Reference number: A48232; MUID:93342083
A;Accession: B48232
A;Cetain.
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C;Date: 21-Jul-2000 #sequence_revision 21-Jul-2000 #text_change 21-Jul-2000
C;Accession: T51039
C;Accession: T51039
R;Schulte, U; Aidn, V.; Hoheisel, J.; Brandt, P.; Fartmann, B.; Holland, R.; Nyakatu R;Schulte, U; Aidn, V.; Hoheisel, July 2000
submitted to the Protein Sequence Database, July 2000
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A; Reference number: Z25286
A; Accession: T51039
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A; Residues: 1-142 <SCH>
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                                                                                                                                                                                                                                        C;Superfamily: glutelin
C;Keywords: cell wall; extracellular matrix; fertilization
C;Keywords: cell wall; extracellular matrix; fertilization
F;1-19/Domain: signal sequence #status predicted <SIG>
F;20-196/Product: cysteine-rich extensin-like protein 2 #status experimental <MAT>
                                                                                                                                                                                                                                                                                                                                                                                                                        A; Molecule type: mRNA
A; Residues: 'MAG', 1-105 <GOL>
A; Cross-references: EMBL: Z14014
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  40 WPWEIPCYLTWPFPWP-----PPPPWP 61
                                                                                                          Local Similarity
nes 12; Conserv
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                                                  3 WPW-----WPWKWPLIGGGYDPAPPPPPP 26
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42.9%;
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38.7%;
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Pred. No. 0.63;
                                                                                                             1; Mismatches
                                                                                                                                   Score 68;
Pred. No.
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cysteine-rich extensin-like protein 1 precursor - common tobacco
C;Species: Nicotiana tabacum (common tobacco)
C;Date: 26-May-1994 #sequence_revision 26-May-1994 #text_change 01-Dec-2000
C;Accession: A48232; PQ0475; S24617

RESULT A48232

Thu Jan

31 11:07:43 2002

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cysteine-rich extensin-like protein 4 precursor - common tobacco (fragment) C:Species: Nicotiana tabacum (common tobacco) C:Date: 26-May-1994 #sequence_revision 26-May-1994 #text_change 17-Nov-2000 C:Accession: D48232
                                 R;Wu,
                                                                                                                                                                                                                                                                         В
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C:Date: 20-Sep-1999 #sequence_revision 20-Sep-1999 #text_change 20-Sep-1999
C:Accession: T15446
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                A; Molecule type: DNA
A; Residues: 1-969 < HAW>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             submitted to the EMBL Data Library, May 1996 A:Description: The sequence of C. elegans cosmid C07G1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    hypothetical protein C07G1.4 - Caenorhabditis elegans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            A; Residues: 39-209 <GOL>
A; Cross references: EMBL: Z14020; NID:g19918; PID:g19919
A; Experimental source: stigma, style; strain Petit Havana SR1
C; Superfamily: glutelin
C; Keywords: cell wall; extracellular matrix; fertilization; glycoprotein
F;1-19/Domain: signal sequence #status predicted <SIG>
F;20-209/Product: cysteine-rich extensin-like protein 1 #status experimental <MAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Map position:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Experimental source:
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A; Accession: T15446
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             A; Gene: CESP: C07G1.4
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Cross-references: EMBL:U58751; NID:g1326379; PID:g1326381; PIDN:AAB00657.1; GSPDB:GN00A;Experimental source: strain Bristol N2; clone C07G1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       R; Hawkins,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      A;Reference number: PQ0474; MUID:93005740
A;Accession: PQ0475
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A;Title: Developmental expression of tobacco pistil-specific genes encoding novel extens
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           A; Molecule type: mRNA
A; Residues: 1-209 <WUA>
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A;Accession: A48232
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roc. Natl. Acad. Sci. U.S.A. 90, 6829-6833, 1993
;Title: A tobacco gene family for flower cell wall proteins with a proline-rich domain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Matches 12;
H.; Zou, J.; May, B.; Gu, Q.; Cheung, A.Y. Natl. Acad. Sci. U.S.A. 90, 6829-6833, 1993
                                                                                                                                                                                                                                                                   799 PMGLPAVGAGAPPPPPPPPP 818
                                                                                                                                                                                                                                                                                                                                                                                               Match 37.2%; Local Similarity 55.0%;
                                                                                                                                                                                                                                                                                                                     7 PWKWPLIGGGYDPAPPPPPP 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         45 WPWEIPCYLTWPFPWP------PPPPWP 66
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  preliminary; translated from GB/EMBL/DDBJ
                                                                                                                                                                                                                                                                                                                                                                         Conservative
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38.7%;
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Pred. No. 0
                                                                                                                                                                                                                                                                                                                                                                         Mismatches
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           A; Status: preliminary;
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C;Accession: T17454
R;Tominaga, T.; Sahai, E.; Treisman, R.H.; Alberts, submitted to the EMBL Data Library, September 1998
                           A; Reference number: Z18796
A; Accession: T17454
                                                                                                                                            C;Species: Mus musculus (house mouse)
C;Date: 15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 15-Oct-1999
                                                                                                                                                                                                                                          RESULT
T17454
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A;Molecule type: protein
A;Residues: 1-10 <50K2,
A;Residues: 1-10 cf0K2,
R;Barovsky, D.; Carlson, D.A.; Griffin, P.R.; Shabanowitz, J.; Hunt, D.F.
Insect Biochem. Mol. Biol. 23, 703-712, 1993
A;Title: Mass spectrometry and characterization of Aedes aegypti trypsin modulating o
A;Reference number: A61630; MUID:93357794
                                                                                                                                                                                                           diaphanous-related formin - mouse
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          A; Molecule type: protein A; Residues: 1-10 < BO2>
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C;Superfamily: glutelin
C;Keywords: cell wall; extracellular matrix; fertilization; glycoprotein
C;Keywords: cell wall; extracellular matrix; fertilization; glycoprotein
F;1-17/Domain: signal sequence #status predicted <SIG>
F;18-159/Product: cysteine-rich extensin-like protein 4 #status experimental <MAT>
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         C; Function:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 A; Note: none of the amino acids is modified
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A;Cross-references: GB:L13442
A;Note: authors failed to translate the codon GCT for residue 11 as Ala, and GTA for hunder authors translated the codon TCT for residue 60 as Pro, and CCA for residue
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           trypsin-modulating oostatic factor - yellow fever mosquito (;Species: Aedes aegypti (yellow fever mosquito) C;Date: 12-Apr-1991 #sequence_revision 12-Apr-1991 #text_change 24-May-1996
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    A;Reference number: A36454; MUID:90367888
A;Accession: A36454
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A;Accession: D48232
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Query Match
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                                                                                                                                                                                                                                                                                                                                                1 YDPAPPPPPP 10
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translated from GB/EMBL/DDBJ
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           factor: a novel decapeptide modulating trypsin-like enzyme
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Pred. No.
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Pred. No. 1;
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0.065;
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A; Residues: 1-1171 <TOM>
A; Cross-references: EMBL:
C; Genetics:
A; Gene: Dia2
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A;Cross-references: EMBL:X74229; NID:g433616; PIDN:CAA52300.1;
A;Note: submitted to the EMBL Data Library, July 1993
C;Genetics:
A;Gene: VCS-betal
                                                                                                                                                                                                                                                                                                                                                                            proline-rich protein V-beta 1 precursor - rat
C:Species: Rattus norvegicus (Norway rat)
C:Date: 06-Jan-1995 #sequence_revision 06-Jan-1995 #text_change 19-May-2000
C:Accession: A53118; S39206
R:Courty, Y.; Rosinski-Chupin, I.; Rougeon, F.
J. Biol. Chem. 269, 520-527, 1994
A:Title: A new proline-rich protein precursor expressed in the salivary glands of the rata. Reference number: A53118; MUID:94103265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        mofA protein precursor [imported] - Leptothrix discophora C;Species: Leptothrix discophora C;Date: 02-Sep-2000 #sequence_revision 02-Sep-2000 #text_change 08-Sep-2000 C;Accession: T18540
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T18540
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A; Accession: T18540
                                                                                              A;Introns: 18/3
C;Superfamily: proline-rich peptide P-B
C;Superfamily: proline-rich peptide P-B
C;Superfamily: glycoprotein
F;1-18/Domain: signal sequence #status predicted <SIG>
F;1-18/Domain: signal sequence #status predicted <MAT>
F;19-148/Product: proline-rich protein V-beta 1 #status predicted <MAT>
F;133,143/Binding site: carbohydrate (Asn) (covalent) #status predicted
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A; Residues: 1-1662 <COR>
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Best Local
               Query Match
Best Local S
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Local Similarity
hes 10; Conser
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62.5%;
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52.9%;
                 35.0%;
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Pred. No.
                   Pred.
                                      Score 64;
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                       No.
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17;
                                        DB 2;
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  5;
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                                        Length 148;
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Search completed: January 30, 2002, 11:50:31

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C;Accession: S21961
R;Roberts, M.R.; Foster, G.D.; Blundell, R.P.; Robinson, S.W.; Draper, J.; Scott, R.J submitted to the EMBL Data Library, August 1991
submitted to the EMBL Data Library, August 1991
A;Description: Cloning and characterization of a proline-rich gene expressed specific A;Reference number: S16748
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              proline-rich protein APG - Arabidopsis thaliana
C:Species: Arabidopsis thaliana (mouse-ear cress)
C:Date: 13-Jan-1995 #sequence_revision 13-Jan-1995 #text_change 09-Sep-1997
C:Accession: S21961
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S21961
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         A; Introns: 256/1; 299/3; 387/3; 470/1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  A;Cross-references: EMBL:X60377; NID:g22598; PID:g22599
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       A; Molecule type: DNA
A; Residues: 1-534 < ROB>
                                                                                                                                                                          A; Map position: 4
A; Introns: 337/2;
A; Note: F8F16.10
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               A; Accession: S21961
                                                                                                                                                                                                                                                        A; Experimental source: cultivar Columbia; BAC clone F8F16
                                                                                                                                                                                                                                                                           A; Cross-references: EMBL: AL021633
                                                                                                                                                                                                                                                                                                                                   A; Reference number: Z15375
A; Accession: T04487
                                                                                                                                                                                                                                                                                                                                                                                              R; Bevan, M.; Brandt, P.; Dose, S.; Jarke, D.; Scharfe, M.; Schon, O.; Hoheisel,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    RESULT
멍
                                                                                                                                                                                                                                                                                                A; Molecule type: DNA
A; Residues: 1-650 <BEV>
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Best Local S
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106 PPFPGPYDSAPPPPPP 121
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                                   11 PLIGGGYDPAPPPPPP 26
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   1 RRWPW-----WPWKWPLIGGGYDPAPPPPPP 26
                                                                             l Similarity
11; Conserv
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37.5%;
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Pred. No.
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Pred. No. 8
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                                                                                    Mismatches
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8.3;
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